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(ii) MOLECULE TYPE: peptide

(vi) ORIGINAL SOURCE:

(A) ORGANISM: *Neisseria meningitidis*

(B) STRAIN: Serogroup A, subgroup III, strain Z3524

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Leu	Tyr	Tyr	Lys	Asn	Tyr	Arg	Tyr	Tyr	Ala	Leu	Lys	Ser	Gly	Gly	Ser
1				5					10					15	
Val	Asn	Ala	Pro	Met	Pro	Glu	Asn	Gly	Gln	Thr	Glu	Asn	Asn	Asp	Trp
			20					25					30		
Val	Phe	Met	Gly	Tyr	Lys	Gln	Glu	Glu	Ala	Gln	Lys	Asn	Ala	Met	Asn
		35					40					45			
His	Lys	Asn	Asn	Gln	Arg	Ile	Ser	Gly	Phe	Ser	Gly	Phe	Phe	Gly	Glu
	50					55					60				
Glu	Asn	Gly	Lys	Gly	His	Asn	Gly	Ala	Leu	Asn	Leu	Asn	Phe	Asn	Gly
65					70				75					80	
Lys	Ser	Ala	Gln	Asn	Arg	Phe	Leu	Leu	Thr	Gly	Gly	Thr	Asn	Leu	Asn
				85					90					95	
Gly	Lys	Ile	Ser	Val	Thr	Gln	Gly								
				100											

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(vi) ORIGINAL SOURCE:

(A) ORGANISM: *Neisseria gonorrhoeae*

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Leu	Tyr	Tyr	Lys	Asn	Tyr	Arg	Tyr	Tyr	Ala	Leu	Lys	Ser	Gly	Gly	Arg
1				5					10					15	
Leu	Asn	Ala	Pro	Met	Pro	Glu	Asn	Gly	Val	Ala	Glu	Asn	Asn	Asp	Trp
			20					25					30		
Val	Phe	Met	Gly	Tyr	Thr	Gln	Glu	Glu	Ala	Arg	Lys	Asn	Ala	Met	Asn
		35					40					45			
Asn	Lys	Asn	Asn	Arg	Arg	Ile	Gly	Asp	Phe	Gly	Gly	Phe	Phe	Asp	Glu
	50					55					60				

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50		55		60
Glu Asn Gly Lys Gly His Asn Gly Ala Leu Asn Leu Asn Phe Asn Gly				
65		70		75
Lys Ser Ala Gln Asn Arg Phe Leu Leu Thr Gly Gly Thr Asn Leu Asn				
	85		90	95
Gly Lys Ile Ser Val Thr Gln Gly				
	100			

## (2) INFORMATION FOR SEQ ID NO: 2:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: unknown

## (ii) MOLECULE TYPE: peptide

## (vi) ORIGINAL SOURCE:

- (A) ORGANISM: *Neisseria meningitidis*
- (B) STRAIN: Serogroup C, ET-37 complex, strain Z4400

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Leu Tyr Tyr Lys Asn Tyr Arg Tyr Tyr Ala Leu Lys Ser Gly Gly Ser				
1	5	10	15	
Val Asn Ala Pro Met Pro Glu Asn Gly Val Thr Glu Asn Asn Asp Trp				
	20	25	30	
Val Phe Met Gly Tyr Thr Gln Glu Glu Ala Lys Lys Asn Ala Met Asn				
	35	40	45	
His Lys Asn Asn Gln Arg Ile Ser Gly Phe Ser Gly Phe Phe Gly Glu				
	50	55	60	
Glu Asn Gly Lys Gly His Asn Gly Ala Leu Asn Leu Asn Phe Asn Gly				
	65	70	75	80
Lys Ser Ala Gln Asn Arg Phe Leu Leu Thr Gly Gly Thr Asn Leu Asn				
	85	90	95	
Gly Lys Ile Ser Val Thr Gln Gly				
	100			

## (2) INFORMATION FOR SEQ ID NO: 3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: unknown

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## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

## (i) APPLICANT:

(A) NAME: Max-Planck-Gesellschaft zur Foerderung der  
Wissenschaften e.V. Berlin

(B) STREET: Hofgartenstrasse 2

(C) CITY: Muenchen

(E) COUNTRY: Federal Republic of Germany

(F) POSTAL CODE (ZIP): D-80539

(A) NAME: Pasteur Merieux Serums et Vaccines S.A.

(B) STREET: 58, Avenue Leclerc

(C) CITY: Lyon

(E) COUNTRY: France

(F) POSTAL CODE (ZIP): F-69007

(ii) TITLE OF INVENTION: Carrier Peptide

(iii) NUMBER OF SEQUENCES: 5

## (iv) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

## (2) INFORMATION FOR SEQ ID NO: 1:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

## (vi) ORIGINAL SOURCE:

(A) ORGANISM: Neisseria meningitidis

(B) STRAIN: Serogroup A, subgroup III, strain Z3906

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Leu Tyr Tyr Lys Asn Tyr Arg Tyr Tyr Ala Leu Lys Ser Gly Gly Ser  
1 5 10 15

Val Asn Ala Pro Met Pro Glu Asn Gly Gln Thr Glu Asn Asn Asp Trp  
20 25 30

Ile Leu Met Gly Ser Thr Gln Glu Glu Ala Lys Lys Asn Ala Met Asn  
35 40 45

His Lys Asn Asn Gln Arg Ile Ser Gly Phe Ser Gly Phe Phe Gly Glu

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Glu Asn Gly Lys Gly His Asn Gly Ala Leu Asn Leu Asn Phe Asn Gly  
 65 70 75 80

Lys Ser Ala Gln Asn Arg Phe Leu Leu Thr Gly Gly Ala Asn Leu Asn  
 85 90 95

Gly Gly Asn Gly Arg Pro Val Lys  
 100

## (2) INFORMATION FOR SEQ ID NO: 5:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: unknown

## (ii) MOLECULE TYPE: peptide

## (vi) ORIGINAL SOURCE:

- (A) ORGANISM: *Neisseria gonorrhoeae*
- (B) STRAIN: Strain MS11

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

Leu Tyr Tyr Lys Asn Tyr Arg Tyr Tyr Ala Leu Lys Ser Gly Gly Arg  
 1 5 10 15

Leu Asn Ala Pro Met Pro Glu Asn Gly Val Ala Glu Asn Asn Asp Trp  
 20 25 30

Ile Phe Met Gly Tyr Thr Gln Glu Glu Ala Arg Lys Asn Ala Met Asn  
 35 40 45

His Lys Asn Asn Arg Arg Ile Gly Asp Phe Gly Gly Phe Phe Asp Glu  
 50 55 60

Glu Asn Gly Lys Gly His Asn Gly Ala Leu Asn Leu Asn Phe Asn Gly  
 65 70 75 80

Lys Ser Ala Gln Asn Arg Phe Leu Leu Thr Gly Gly Ala Asn Leu Asn  
 85 90 95

Gly Lys Ile Ser Val Thr Gln Gly  
 100